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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,887	12/22/1999	Rishi Mohindra	PHA-23-916	5482

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PHILIPS ELECTRONICS NORTH AMERICA CORPORATION  
INTELLECTUAL PROPERTY & STANDARDS  
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SAN JOSE, CA 95131

EXAMINER

NGUYEN, THUAN T

ART UNIT PAPER NUMBER

2685

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/469,887

**Applicant(s)**

MOHINDRA, RISHI

**Examiner**

THUAN T. NGUYEN

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/6/04 has been entered.

### ***Remark***

2. Applicants cancel claims 8-16 and 22-25 in the amendment dated 6/10/04.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-7, and 17-21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

5. Claims 1-7 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petrick et al. (US Patent 5,712,870/ or "Petrick") in view of Wright et al. (US Patent 5,990,734).

Regarding claim 1, this limitation is met as Andren discloses a transceiver (as illustrated in Fig. 2) having a power amplifier (Fig. 2/item 78) and a pair of up-converter mixers (Fig. 2/a

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pair of mixers 72 with up-converter RF/IF 30) for an improved power ramping method comprising switching on the power amplifier after an end of a prior packet reception period, and ramping modulation signals supplied to the up-converter mixers upon initiation of a new packet transmission, i.e., power ramping technique is controlled by preamble field within a transmission/receiving packet message (as shown in Fig. 1), and the baseband processor 80 controls the power consumption of the transceiver (Fig. 2) including better signal timing and provide necessary functions for modulating and demodulating of receiving/transmitting signals (col. 6/lines 50-60); moreover, with a symbol and tracking timing circuit 90 (col. 7/lines 29-41), the timing detection of received packet is realized and the power ramping is applied to modulation signals of a new packet transmission accordingly before submitting the signals to the up-converter mixers using the CRCs for checking the value of packet length received (see col. 9/line 45 to col. 10/line 4). In addition, Petrick discloses in the transmit side, the spread signal from spreader 66, in the forms of I and Q components, may be amplified, filtered and modulated within the modulator/demodulator 42 by amplifiers 68, filters 70 and mixers 72, and the modulated signal output from mixers 72 may be amplified by amplifier 74, filtered by filter 76 and upconverted to RF by RF/IF converter 30, and this signal also can be power amplified by power amplifier 78, provided to one of the antenna, as selected by the switch 24 (col. 5/lines 30-43 & col. 6/lines 39-49).

Petrick might not clearly show how the “power ramping” is applied to the modulated signals; however, Wright teaches a same technique on how to apply the “power ramping” to the modulated signals of after the upconverting step upon initiation of a new packet transmission as Wright explains that during or after the RF upconverted before signal transmission, amplitude

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and phase (of I and Q signals) are varying components (Wright, col. 4/lines 9-19), and then if parameters need to be updated, for instance, a new packet transmission is required or a power on of the mobile device, an adaptive compensation estimation process is used to monitor and adjust the component signal outputs (which is I & Q signals) between burst transmission, the power ramping to modulated signals is performed based on the detection process, i.e., whether a power ramping up is needed (see Wright, col. 4/line 38-col. 5/line 30; Fig. 2 and col. 7/lines 39-53 & Fig. 10B, col. 18/line 54 to col. 19/line 33 & col. 19/line 63 to col. 21/line 19). Therefore, it would have been obvious to one of ordinary skill in the art to modify Petrick's system with Wright's teaching technique in detecting and compensating on modulated signals by power ramping up the signals as needed before signal transmission within the detection of updated parameters and/or between transmission bursts during the process of acquiring new packet transmission as desired.

As for claim 2, this limitation is met as Petrick discloses wherein the modulation signals are in-phase (I) and quadrature-phase (Q) signals (Fig. 2, and col. 6/lines 18-49).

As for claim 3, this limitation is met as Petrick further includes a differential phase shifted keyed (DPSK) for providing monotonically or discretely a set of digital words representing the I and Q signals (col. 6/lines 50-62).

As for claim 4, this limitation is met as Petrick discloses that the received signals is mixed with a locally synthesized periodic signal (by a mixer, understood to be an analog signal) in the quadrature demodulation (col. 6/lines 18-34) and the baseband processor can handle to convert analog signals into digital signals (col. 5/lines 24-30).

As for claim 5, this limitation is met as Petrick suggests that the tracking of incoming bits (of a packet) is performed until the last bit of the packet is received (col. 9/lines 45-67) as the preamble field within a packet is used for determining the timing of the switching of the receiver from one signaling format to another (col. 9/lines 10-23).

As for claim 6, this limitation is met as Petrick discloses that the preamble of the header is detected for interface detection and for power ramping (col. 4/lines 40-58 & col. 9/lines 10-67).

As for claim 7, this limitation is also met as Petrick notes that there is a given time period for the demodulation circuitry gets a "head start" in reacquiring and demodulating the incoming data within a brief period before preparing the transmission step for a new transmission packet (col. 8/lines 22-61).

As for claims 17-21, these claims for an improved power ramping method with same limitations within a transmitter or within a spread spectrum transceiver (col. 6/line 63 to col. 7/line 11 for spread spectrum transceiver addressed) are rejected for the reasons given in the scope of claims 1-7 as disclosed above in view of Petrick and Wright.

### ***Conclusion***

**6. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306, (for Technology Center 2600 only)**

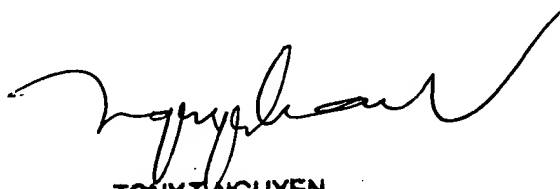
*Hand-delivered responses should be brought to Crystal Park II,  
2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony Thuan Nguyen whose telephone number is (703) 308-5860. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:30 PM, with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703) 305-4385.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Technology Center 2600 Customer Service Office** whose telephone number is **(703) 306-0377**.



TONY T. NGUYEN  
PATENT EXAMINER

Tony T. Nguyen  
Art Unit 2685  
January 03, 2005.